



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,748	12/29/2005	Jerome Delamare	39291	7709
116 7590 06/04/2007 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			EXAMINER BARRERA, RAMON M	
			ART UNIT 2832	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/562,748

Applicant(s)

DELAMARE ET AL.

Examiner

Ramon M. Barrera

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 9-17 and 20-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/29/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of group I, species II, in the reply filed on 5/22/07 is acknowledged. The traversal is on the ground(s) that claims 1 (group I) and 21 (group II) have common special technical features. This is not found persuasive because a determination of unity of invention is based on technical features that are allowable over the prior art (Rule 13.2). Currently, claim 1 has no technical features allowable over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 9-17, 20-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/22/07.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR2828000, cited on applicant's IDS, in view of Uozumi or Mohler.

FR2828000 discloses a magnetic actuator including a mobile magnetic portion 1, a fixed magnetic portion 3 provided with at least two attraction areas 3-2 for the mobile

Art Unit: 2832

magnetic portion, and means 4 for triggering the displacement of the mobile magnetic portion, the mobile magnetic portion being in levitation when it is not in contact with an attraction area, characterized in that each attraction area has a geometry conjugate to that of the face of the mobile magnetic portion which must come into contact with it.

FR2828000 did not disclose where the mobile magnetic portion includes a magnet-based part with reduced magnet weight. Either Uozumi (col. 2, lines 27-30) or Mohler (col. 4, lines 36-65) disclose magnetic armatures with mass removed from non-critical portions of their volumes for the purpose of reducing their weight and increase their acceleration during energization. Since FR2828000, Uozumi, and Mohler are all from the same field of endeavor, the purpose disclosed by Uozumi or Mohler would have been recognized in the pertinent art of FR2828000. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in FR2828000 a mobile magnetic portion having a reduced mass for the purpose of reducing its weight and increase its acceleration during energization. The shape of the reduced portion, ie., holes, recesses, rectangular plate, etc., would have been an obvious matter of design choice, since applicant has not disclosed that the shape of the recess solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with recesses of multiple shapes. It would have been obvious to fill recesses with lesser density solid material to preserve the structural integrity of the armature against breakage.

Art Unit: 2832

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over FR2828000, cited on applicant's IDS, in view of Uozumi or Mohler, and further in view of Uetsuhara, et al.

FR2828000, in view of Uozumi or Mohler, did not disclose at least one of the attraction areas includes a dielectric portion so as to achieve capacitive contact when the mobile magnetic portion (20) is stuck on said attraction area.

Uetsuhara, in fig. 9, discloses an attraction area including a dielectric portion 6 for achieving capacitive contact and reduced impact force when the mobile magnetic portion is stuck on said attraction area. It would have been obvious at the time the invention was made to one of ordinary skill in the art to employ a dielectric portion in FR2828000 in view of Uozumi or Mohler for the purpose of achieving a reduced impact force when the mobile magnetic portion is stuck on said attraction area and inherently providing a capacitive contact.


6. The prior art made of record and not relied upon discloses armatures with reduced mass.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramon M. Barrera whose telephone number is (571) 272-1987. The examiner can normally be reached on Monday through Friday from 11 to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ramon M Barrera  
Primary Examiner  
Art Unit 2832

rmb